

A Newsroom on the Cheap

by John Deveck

[BALTIMORE, Maryland - July 2004] Well, this was a busy NAB. I saw a lot of things, but there was a lot more I did not get to see. Between chatting with old friends, talking, walking, making new friends, walking, eating, some more walking and meetings, I still managed to miss a lot of people and products.

Still, what I did see made the trip well worthwhile. For those of you that have not experienced an NAB, you really must get there. Nowhere else in the world can you see so much amazing gear in one place – nor so much hype and farce. But that comes with any trade show. This year I did have a goal in mind. I wanted to find a way to do a simple news desk for school stations. And I think I did!

A COMMON NEED

Many school stations need a way to do remote news and interview gathering, but have little space, engineering resources or budget to achieve this goal. At WLOY I have set up some simple desks, which are not really ideal, but are functional nonetheless. I really wanted to find a better way to do this – for us and you.

A basic news desk ought to be able to accomplish some simple tasks easily and quickly. It needs to have a telephone hybrid so a reporter can whip up a quick interview for a news report. A computer-based audio editing system that delivers quick composition and recording can ensure consistent work. Headphones, microphones and functionality need to be interfaced simply and easily, especially since many of the students doing news are not regular DJs.

Above all, a good news desk needs to have multiple busses so that hybrids work, editing works and no one has to listen to feedback, echoes or worse. Finally, to do it without breaking the bank or requiring a complex wiring plan, I needed a widget for all the ins and outs required of a news desk.

PUTTING IT TOGETHER

We will start with a new product from the folks at Henry Engineering, best known for their innovative solutions for common problems. Thousands of stations use Henry products like their remote relays to trigger on-air lights, or their level converter interfaces.

For NAB 2004, those crafty folks have come up with one of those wonderful things you did not really know you needed – or in my case, you knew, but no one made it. They call it the StudioDrive, and it fits into the standard drive bay of a PC (I suppose it might also fit a Mac, but finding one with a standard drive bay is a bit more of a trick). Thank you, Hank!



Henry Engineering StudioDrive

This nifty little box has everything you need for a simple news studio – or any other simple studio. It has a microphone input for the news person, a telephone hybrid interface for your remote interview, a spare input for all manner of options (second person in the studio, live music mix, etc.). And, most importantly, individual lines for the PC audio card, monitors and headphones. It is like they thought of everything.

Internal busing makes sure that you can route audio the way you want and monitor either the input (recording) or output (playback) of your PC audio. A simple interface box has all the 1/4" connection points for ins and outs neatly arranged and labeled. With the mix of balanced and unbalanced, mono and stereo inputs, you should be able to make almost anything work. And it all connects to the internal drive wiring harness in your PC for power.

So there you have a simple, in-PC mixer for \$595. Of course, now we need the rest of the studio, so you can compile newscasts with ease.

ADDING MORE PIECES

While the StudioDrive has a built in tele-coupler, I would rather use a full hybrid for my studio setup. (You are free to disagree; after all it is your money.) However, since most schools now operate on a digital PBX system, I would suggest something simple like JK Audio's innkeeper PBX (\$495) as the next step. It offers a compact solution for easy interfacing to a digital PBX system, with all those basic things you need – mix minus, level adjustments and easy connections.

I am already a fan of JK Audio gear, and using innkeeper rack mount units in my own news gathering desks right now. It all connects easily to the StudioDrive, but since the JK unit has XLR and the Studio Drive has 1/4" jacks, we do need a set of cables. Assuming that your engineering assistance is limited, perhaps you ought to order any adapter cables when you order the equipment.



JK Audio innkeeper PBX

Turning to the microphone itself, how about a new Studio Projects C1 condenser microphone and an LPB Silent Boom (of course, my bias shows a bit here). For relatively little money (\$300) you get a clean, solid, large diaphragm condenser microphone and a heavy-duty arm (\$160).

The StudioDrive has a microphone preamp, but my preference is usually to go with outboard preamps and processing if I can afford them. (Let your budget dictate this area.) I also prefer a tube in the audio path if possible, but I am not suggesting sending Doug Fearn \$2,400 for a VT-1 preamp to put in my "newsroom on the cheap," much as I would like one. Instead you might try something simple like a Tube Pac desktop Microphone Tube Preamp/Compressor from ART (\$245).

Since you do need to be able to hear what is going on, a simple inexpensive pair of AKG Headphones will get you there and leave change in your pocket. There are a zillion choices for decent headphones out there, but you need to determine how well each survives in your environment. Most stations will not buy big dollar headphones for DJs that play Samsonite Gorilla with them. AKG and Koss, among others, make very reasonably priced, good headphones.

AUDIO HORSEPOWER

Many schools have easy access to a generic PC through their IT departments. A screaming fast machine is not required; a 1 GHz Pentium III can be reasonably effective running audio software (Adobe recommends 2 GHz or better, and Windows 2000 or XP). Bump up the RAM to about 256 (Adobe would like 512).

I like the MIA Audio Cards from Echo. They sound good, are inexpensive, and have easy on screen controls. We have not had a failure or problem with any of the 15 in WLOY machines. However, there do appear to be some issues with the drivers and the newest version of Audition, so my only caveat – as with most computer hardware – is to suggest you download the latest drivers as soon as you set up the system.

To manipulate the audio, I would suggest Adobe Audition (the software formerly known as Cool Edit). Most folks know the old name, but the new owners were smart enough not to mess with success and the new version works just as well as the old. The latest version of Audition (V1.5) sells for \$299. Note that Adobe offers both bulk licensing and discounts for educational institutions; check with your IT folks for their price for Audition – you will be pleased with the savings.

Use a good-sized hard drive to provide storage for your projects – especially long interviews. A CD-R or DVD-R is a must for moving your files out to air or archives.

Of course, there are always lower or higher cost options. If you really must pinch pennies, drop down to a simpler microphone with a desk stand, lose the preamp, use the StudioDrive's built in coupler and cut costs quite a bit. Of course, the package may not be as tasty, but it will still work well.

Counting the Cost

Now you have a generic PC you can get from the IT department and a shopping list for a simple Newsroom. Better than that, it is easy to put it together. If you follow my basic recipe (as with all good recipes – modify it to suit your tastes), here is what you need:

- 1 Generic PC with CD-R - ask IT guys
- 1 Adobe Audition Software - \$299.00
- 1 Echo MIA PC Audio Card - \$249.00
- 1 Henry Engineering Studio Drive Mixer - \$595.00
- 1 JK Audio Innkeeper PBX Hybrid - \$495.00
- 1 Studio Projects C1 Microphone - \$300.00
- 1 LPB Silent Boom Mic Arm w/riser - \$185.00
- 1 ART Tube Pac Mic Preamp/Compressor - \$245.00
- 1 AKG K110M Headphone - \$45.00

Put it all together and a complete news desk is under \$2,500, plus a PC. I took the liberty of calling one of my dealer friends – Dave Kerstin at Broadcasters General Store – to get a "street price" for a package like this. He says, "Buy Adobe directly, online; the rest of it is yours for \$1,542 plus shipping." So there you have it: a new Newsroom for about \$1,800 and a PC.

Come to think of it, since the StudioDrive has a couple of extra inputs, we could add an inexpensive dual CD player. This gives us a full production studio, and our cost would still be way under \$2,500. How is that for making the most of a modest budget?

John Deveck is the Operations Manager at WLOY at Loyola College in Maryland. He tries to find ways to do the right thing with a bit less money. If you have improvements on this package, suggestions or general grumbles about it, please feel free to let him know! jdevcka@loyola.edu.